10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KEAP1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10715

Product Information

Application	WB, IHC
Primary Accession	Q14145
Other Accession	NM_203500, NP_987096
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69666

Additional Information

Gene ID	9817
Alias Symbol	INrf2, KIAA0132, KLHL19, MGC10630, MGC1114, MGC20887, MGC4407, MGC9454
Other Names	Kelch-like ECH-associated protein 1, Cytosolic inhibitor of Nrf2, INrf2, Kelch-like protein 19, KEAP1, INRF2, KIAA0132, KLHL19
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-KEAP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	KEAP1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KEAP1 {ECO:0000303|PubMed:14585973, ECO:0000312|HGNC:HGNC:23177}
Function	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that regulates the response to oxidative stress by targeting NFE2L2/NRF2 for ubiquitination (PubMed:14585973, PubMed:15379550, PubMed:15572695, PubMed:15601839, PubMed:15983046, PubMed:37339955). KEAP1 acts as a key sensor of oxidative and electrophilic stress: in normal conditions, the BCR(KEAP1) complex mediates ubiquitination and degradation of NFE2L2/NRF2, a transcription factor regulating expression of many cytoprotective genes (PubMed:15601839, PubMed:16006525). In

response to oxidative stress, different electrophile metabolites trigger non-enzymatic covalent modifications of highly reactive cysteine residues in KEAP1, leading to inactivate the ubiquitin ligase activity of the BCR(KEAP1) complex, promoting NFE2L2/NRF2 nuclear accumulation and expression of phase II detoxifying enzymes (PubMed:16006525, PubMed:17127771, PubMed:18251510, PubMed:19489739, PubMed:29590092). In response to selective autophagy, KEAP1 is sequestered in inclusion bodies following its interaction with SQSTM1/p62, leading to inactivation of the BCR(KEAP1) complex and activation of NFE2L2/NRF2 (PubMed:20452972). The BCR(KEAP1) complex also mediates ubiquitination of SQSTM1/p62, increasing SQSTM1/p62 sequestering activity and degradation (PubMed:28380357). The BCR(KEAP1) complex also targets BPTF and PGAM5 for ubiquitination and degradation by the proteasome (PubMed:15379550, PubMed:17046835).

Cellular Location

Cytoplasm. Nucleus. Note=Mainly cytoplasmic (PubMed:15601839). In response to selective autophagy, relocalizes to inclusion bodies following interaction with SQSTM1/p62 (PubMed:20452972).

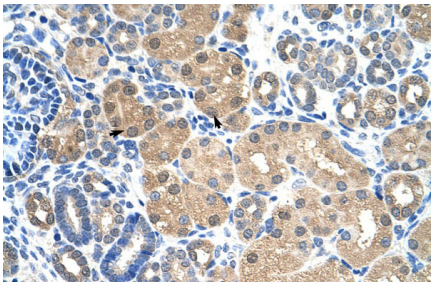
Tissue Location

Broadly expressed, with highest levels in skeletal muscle.

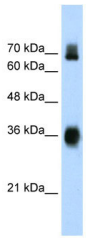
References

Padmanabhan,B., (2006) Mol. Cell 21 (5), 689-700 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

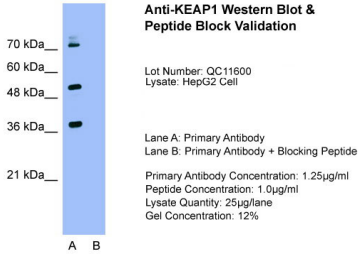
Images



Human kidney



WB Suggested Anti-KEAP1 Antibody Titration: 1.0µg/ml
Positive Control: HepG2 cell lysate
KEAP1 is supported by BioGPS gene expression data to be expressed in HepG2



Host: Rabbit
Target Name:KEAP1
Sample Tissue:HepG2
Lane A: Primary Antibody
Lane B: Primary Antibody + Blocking Peptide
Primary Antibody
Concentration:1.25µg/ml
Peptide Concentration: 1.0µg/ml
Lysate Quantity: 25ug/lane Gel

Concentration: 12%KEAP1 is supported by BioGPS gene expression data to be expressed in HepG2